

WHAT IS CLAIMED IS:

1. A method for manufacturing a circuit device,
comprising:

5 a bonding step of pressing a terminal section of
an electronic component including an element for
performing an electrical function against a wiring
substrate having a wiring layer by a tool whose
pressing face has a given shape to electrically bond
the electronic component and the wiring layer together
10 at the terminal section; and

a stacking step of electrically bonding another
component to at least part of the terminal section
bonded by the tool.

2. The method according to claim 1, wherein all
15 terminal sections of electronic components have
substantially same height.

3. A method for manufacturing a circuit device,
comprising:

20 a bonding step of mounting an electronic component
including an element for performing an electrical
function on an insulation layer stacked on a wiring
layer of a wiring substrate and pressing a terminal
section of the mounted electronic component against
the wiring substrate by a tool whose pressing face has
25 a given shape to electrically bond the electronic
component and the wiring layer together at the terminal
section; and

a stacking step of electrically bonding another component to at least part of the terminal section bonded by the tool.

5 4. The method according to claim 3, wherein all terminal sections of electronic components have substantially same height.

10 5. An electronic component including an element main body section for performing an electrical function and a terminal section for electrically connecting the element main body section to a conductive member of an external device, the electronic component comprising a pair of sections arranged above the terminal section and opposite to each other in a stacking direction in which the electronic component is to be stacked,
15 a distance between the sections corresponding to a maximum thickness of the electronic component.

6. The electronic component according to claim 5, wherein the pair of sections serves as an electrode when the sections are arranged within a single plane.

20 7. A method for manufacturing an electronic component, comprising:

a step of shaping a surface of a mold material irregularly;

25 a step of forming a cathode on the surface of the mold material, the cathode being used for electroplating;

a step of providing an element main body for

performing an electrical function on the cathode and
filling at least a most hollow portion of the cathode
with conductive materials by electroplating using the
cathode to electrically connect the element main body
5 and the conductive materials of the most hollow
portion;

a step of sealing the element main body and the
conductive materials with resin;

a step of forming an opening excluding the resin
10 directly above the most hollow portion and exposing the
conductive materials; and

a step of filling the opening with conductive
materials.

8. A circuit device comprising a plurality of
15 electronic components each including an element main
body for performing an electrical function and a
terminal section for electrically connecting the
element main body to a conductive member, the plurality
of electronic components being stacked one on another
20 by electrically bonding a bump electrode of the
terminal section of an electronic component to that of
the terminal section of another electronic component,
and a space between the stacked electronic components
being filled with an insulative material.

25 9. The circuit device according to claim 8,
further comprising a bonding section formed between
the electronic components connected to each other by

diffusion bonding.

10. A semiconductor device comprising a semiconductor element bonded to the circuit device according to claim 8.

5 11. A circuit device comprising a plurality of electronic components each including an element main body for performing an electrical function and a terminal section for electrically connecting the element main body to a conductive member, the plurality
10 of electronic components being stacked one on another by electrically bonding a bump electrode of the terminal section of an electronic component to that of the terminal section of another electronic component, a space between the stacked electronic components being
15 filled with an insulative material, and an electrode to which a bump electrode of an electronic component is electrically bonded being arranged in a direction opposite to a stacking direction of the electronic components.

20 12. The circuit device according to claim 11, further comprising a bonding section formed between the electronic components connected to each other by diffusion bonding.

25 13. A semiconductor device comprising a semiconductor element bonded to the circuit device according to claim 11.

14. A circuit device comprising a plurality of

electronic components each including an element main
body for performing an electrical function and
a terminal section for electrically connecting the
element main body to a conductive member, the plurality
5 of electronic components being stacked one on another
by electrically bonding a bump electrode of the
terminal section of an electronic component to that of
the terminal section of another electronic component,
a space between the stacked electronic components being
10 filled with an insulative material, and an electrode to
which a bump electrode of an electronic component is
electrically bonded being arranged in a direction
opposite to a thickness direction of the circuit
device.

15 15. The circuit device according to claim 14,
further comprising a bonding section formed between
the electronic components connected to each other by
diffusion bonding.

20 16. A semiconductor device comprising a
semiconductor element bonded to the circuit device
according to claim 14.